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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
FLEURANTIN, JEAN B	
ART UNIT	**PAPER NUMBER**
2162	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/782,229	BERNSTEIN ET AL.	
	Examiner	Art Unit	
	JEAN B. FLEURANTIN	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *76-93* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *76-93* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This is in response to Applicant amendment filed on 11/13/06.

This following is the status of claims:

Claims 1-66 previously canceled in the preliminary amendment (dated 02/19/04).

Claims 67-75 have been canceled.

Claims 76-93 have been added.

Claims 76-93 remain pending for examination.

Applicant's arguments filed 11/13/06 with respect to claims 76-93 have been fully considered but they are not persuasive for the following reasons, see sections I (rejection of claims) and II (response to arguments).

Claim Objections

Claims 85, 88 and 91 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 76, 79 and 82. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Double Patenting

I. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-8 of Patent No. 6,728,726 contain every element of claims 76-93 of the instant application. Claims 76-93 of the instant application and thus anticipate the claims of the instant application. Claims of the instant application therefore are not patently distinct from the earlier patent claims and as such as are unpatentable over obvious-type double patenting. A later application claim is not patentably distinct from an earlier claim if the later claim is anticipated by the earlier claim.

Instant application No. 10/782,229	Patent No. 6,728,726
A method for retrieving data for a set of objects prior to an explicit request for access to the data, each object in the set comprising a plurality of attributes, the method, the method comprising: creating a structure context description that describes the set of objects;	A computerized method for retrieving data for an object or related objects prior to an explicit request for access to the data by a computing application comprising the steps of: creating a structure context description identifying a structure context that comprises a set containing objects, wherein the objects have at least one attribute, wherein the structure context description is stored in a relationship table having a plurality of rows containing items that describe the structure context, wherein the structure context description contains enough information to retrieve all of the rows in the relationship table that describe all of the items in the structure context;

associating the structure context description with each object in the set;	associating the structure context description with each object in the set, **wherein the associating step associates the structure context description to each object in the set by creating a unique identifier between the structure context description and each object**; and
receiving from an application a request for data corresponding to a first attribute of a first object in the set of objects; and	
in response to receiving request:	
	fetching related object data for objects in the set by a data storage system from a physical storage system upon an access to an attribute of one object in the set, wherein the fetching step comprises
	first retrieving object data requested by the computing application using the attribute, ***returning the first requested object data to the requesting computing application,***
retrieving data corresponding to the first attribute of the first object;	retrieving related object data to the first requested object data using the attribute, and
returning the data corresponding to the first attribute of the first object to the application;	
using the structure context description to identify data corresponding to the first attribute of other objects in the set of objects;	
retrieving the data corresponding to the first attribute of the objects in the set of objects; and	
placing in cache the data corresponding to the first attribute of other objects in the set of objects for future use.	placing in cache the related object data for future use by the application.

"A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or anticipated by, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus)." ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

"Claims 76-93 are generic to the species of invention covered by claims 1-8 of the patent. Thus, the generic invention is "anticipated" by the species of the patented invention. Cf., Titanium Metals Corp. v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (holding that earlier species disclosure in the prior art defeats any generic claim). This court's predecessor has held that, without a terminal disclaimer, the species claims preclude issuance of the generic application. In re Van Ornum, 686 F.2d 937, 944, 214 USPQ 761, 767 (CCPA 1982); Schneller, 397 F.2d at 354. Accordingly, absent a terminal disclaimer, claims 1 and were properly rejected under the doctrine of obviousness-type double patenting." (In re Goodman (CAFC) 29 USPQ2d 2010 (12/3/1993).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 76-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,765,159 issued to Srinivasan ("Srinivasan") in view of U.S. Patent No. 6,389,460 issued to Stewart et al., ("Stewart").

As per claim 76, Srinivasan discloses "a method for retrieving data for a set of objects prior to an explicit request for access to the data, each object in the set comprising a plurality of attributes" (i.e., retrieving from dbms all attributes for the object; see col. 6, lines 30-32) comprising:

"creating a structure context description that describes the set of objects" (In light the specification at paragraph [0017], the purposed of creating a structure context is for associating that structure context description with every object in the structure. The method of creating a new path whose attribute (object) value matches the current path is disclosed by Srinivasan col. 10, lines 40-56);

"associating the structure context description with each object in the set of objects" (i.e., set of columns mapping to the base attributes (objects); see col. 5, lines 10-12); and

"receiving from an application a request to data corresponding to a first attribute of a first object in the set of objects" (i.e., receiving the original object query; see col. 8, lines 29-31); and

"in response to receiving the request" (i.e., responding to an object query; see col. 7, lines 36-37);

"retrieving data corresponding to the first attribute of the first object" (i.e., query retrieving only base attributes object; see col. 6, lines 29-32);

"returning the data corresponding to the first attribute of the first object to the application" (i.e., retrieving the data from relational database as a result of executing the object query; see col. 6, lines 32-35);

"using the structure context description to identify data corresponding to the first attribute of other objects in the set of objects" (i.e., using schema mapping information; see col. 10, lines 49-56);

"retrieving the data corresponding to the first attribute of the other objects in the set of objects" (see col. 11, lines 34-40 and Fig. 8).

Srinivasan fails to explicitly disclose placing in cache the data corresponding to the first attribute of the other objects in the set of objects for future use. However, Stewart discloses placing in cache the data corresponding to the first attribute of the other objects in the set of objects for future use. (see Stewart col. 6, lines 57-61). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Srinivasan by placing in cache the data corresponding to

the first attribute of the other objects in the set of objects for future use as disclosed by Stewart (see Stewart col. 8, lines 52-61). Such a modification would allow the method of Srinivasan to provide database structure for storage of the objects and retrieval of object states as attributes of associated files in the files system (see Stewart col. 4, lines 1-3), therefore, improving the accuracy and the reliability of the prefetching and caching persistent objects.

As per claim 77, in addition to claim 76, Srinivasan further discloses "memory of a client application program, memory allocated to a data storage system" (i.e., computer program, residing in a memory; see col. 3, lines 46-50), and "a table of a relational database" (i.e., relational table; see col. 5, lines 10-16).

As per claim 78, in addition to claim 76, Srinivasan further discloses "retrieving by an object repository the data corresponding to the first attribute of the other objects in the set of objects" (i.e., retrieving attributes objects; see col. 6, lines 58-60).

As per claim 79, the limitations of claim 79 are similar to claim 76, therefore, the limitations of claim 79 are rejected in the analysis of claim 76, and this claim is rejected on that basis.

As per claims 80 and 81, the limitations of claims 80 and 81 are similar to claims 77 and 78, therefore, the limitations of claim 80 and 81 are rejected in the analysis of claims 77 and 78, and these claims are rejected on that basis.

As per claim 82, in addition to claim 76, Srinivasan further discloses "a processor operative to execute computer executable instructions: and memory having stored therein computer executable instruction" (i.e., computer system includes one or more processors, a main memory and computer programs which residing in the main memory executed by the processors in the computer system; see col. 3, lines 35-49 and Fig. 2).

As per claims 83 and 84, the limitations of claims 83 and 84 are similar to claims 77 and 78, therefore, the limitations of claim 83 and 84 are rejected in the analysis of claims 77 and 78, and these claims are rejected on that basis.

As per claim 85, the limitations of claim 85 are similar to claim 76, therefore, the limitations of claim 85 are rejected in the analysis of claim 76, and this claim is rejected on that basis.

As per claim 86, in addition to claim 76, Srinivasan further discloses "memory of a client application program, memory allocated to a data storage system" (i.e., computer program, residing in a memory; see col. 3, lines 46-50), and "a table of a relational database" (i.e., relational table; see col. 5, lines 10-16).

As per claim 87, in addition to claim 76, Srinivasan further discloses "retrieving by an object repository the data corresponding to the first attribute of the other objects in the set of objects" (i.e., retrieving attributes objects; see col. 6, lines 58-60).

As per claim 88, the limitations of claim 88 are similar to claim 79, therefore, the limitations of claim 88 are rejected in the analysis of claim 79, and this claim is rejected on that basis.

As per claim 89, in addition to claim 88, Srinivasan further discloses "memory of a client application program, memory allocated to a data storage system" (i.e., computer program, residing in a memory; see col. 3, lines 46-50), and "a table of a relational database" (i.e., relational table; see col. 5, lines 10-16).

As per claim 90, in addition to claim 88, Srinivasan further discloses "retrieving by an object repository the data corresponding to the first attribute of the other objects in the set of objects" (i.e., retrieving attributes objects; see col. 6, lines 58-60).

As per claim 91, in addition to claim 76, Srinivasan further discloses "a processor operative to execute computer executable instructions: and memory having stored therein computer executable instruction" (i.e., computer system includes one or more processors, a main memory and computer programs which residing in the main memory executed by the processors in the computer system; see col. 3, lines 35-49 and Fig. 2).

As per claims 92 and 93, the limitations of claims 92 and 93 are similar to claims 90 and 91, therefore, the limitations of claim 92 and 93 are rejected in the analysis of claims 90 and 91, and these claims are rejected on that basis.

Response to Applicant' Remarks

II. Applicant's arguments with respect to newly added claims 76-93 have been fully considered but they are not persuasive. Because, Srinivasan discloses the claimed limitations, also, independent claims 76, 79, 82, 85 and 91 are rejected under nonstatutory obviousness-type double patenting. Therefore, the amendment does not place the application in condition for allowance.

In response to applicant's arguments, page 8, paragraph 4, "claims 67-75 also stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over United States Patent No. 6,988,095 ("Srinivasan"). Claims 67-75 are hereby cancelled. Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejections are respectfully requested." One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Furthermore, Srinivasan fails to explicitly disclose placing in cache the data corresponding to the first attribute of the other objects in the set of objects for future use. However, Stewart discloses placing in

cache the data corresponding to the first attribute of the other objects in the set of objects for future use. (see Stewart col. 6, lines 57-61). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Srinivasan by placing in cache the data corresponding to the first attribute of the other objects in the set of objects for future use as disclosed by Stewart (see Stewart col. 8, lines 52-61). Such a modification would allow the method of Srinivasan to provide database structure for storage of the objects and retrieval of object states as attributes of associated files in the files system (see Stewart col. 4, lines 1-3), therefore, improving the accuracy and the reliability of the prefetching and caching persistent objects.

MPEP 2111: During patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification" Applicant always has the opportunity to amend the claims during prosecussion and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969). The court found that applicant was advocating ... the impermissible importation of subject matter from the specification into the claim. See also In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997) (The court held that the PTO is not required, in the course of prosecution, to interpret claims in applications in the same manner as a court would interpret claims in an infringement suit. Rather, the "PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definition or otherwise that may be afforded by the written description contained in application's specification.").

The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. In re Cortright, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

CONTACT INFORMATION

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEAN B. FLEURANTIN whose telephone number is 571 – 272-4035. The examiner can normally be reached on 7:05 to 4:35.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 571 – 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jean Bolte Fleurantin

Patent Examiner

Technology Center 2100

January 16, 2007

JOHN BREENE
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